

NYASALAND



PROTECTORATE

Annual Report of the Medical Department for the year 1950

SECTION I. ADMINISTRATION

A. STAFF

1. Dr. P. W. Dill-Russell arrived during May on transfer from Cyprus and assumed duty as Deputy Director of Medical Services.
 2. Dr. C. Sims-Davies was appointed Assistant Director of Medical Services (Health) and arrived from Northern Rhodesia during December.
 3. Dr. C. H. Gurd was transferred from St. Helena and assumed duty during January.
 4. Drs. S. H. Kryszek, J. L. Hardman and J. T. Graham arrived on first appointment as Medical Officers. Dr. E. J. Kirwan was appointed as a Special Grade Medical Officer (Surgeon) and arrived towards the end of December.
 5. One Health Inspector and one Laboratory Technician were appointed and assumed duty during the year.
 6. Miss A. Maslin, Matron, proceeded on leave, pending retirement, after 23 years in the Queen Elizabeth's Colonial Nursing Service, six of which had been in Nyasaland.
 7. Miss M. L. Smith, Nursing Sister, was transferred to Tanganyika Territory during September.
 8. Four Nursing Sisters resigned from the Service, three on account of marriage. Three Nursing Sisters arrived from the United Kingdom on first appointment and two Nursing Sisters were appointed locally.
 9. A Radiographer was appointed locally, on agreement, during July.
 10. Messrs. A. T. M. Mkisi, P. J. G. Mhango and K. W. Mkandawire, Senior Hospital Assistants, were promoted during the year to the posts of Senior Hospital Assistants (Special Class).
- Mr. H. B. Chamba was promoted to the post of Clerk, Special Class.
- Six Hospital Assistants were promoted to Class I posts ; two Clerks and one Storekeeper were promoted to Class I posts.

B. Ordinances, etc.

11. *Ordinances*

(a) The Dangerous Drugs (Amendment) Ordinance, 1950, extends the powers granted by the principal Ordinance which required persons who compound or dispense dangerous drugs to keep a record of the drugs received and the manner of disposal. In practice this was found to be an inadequate safeguard and the amending Ordinance requires persons who compound, dispense, sell, administer or otherwise supply certain drugs to keep a register.

(b) Hotels (Amendment) Ordinance, 1950. This Ordinance gives power to the Governor to establish Hotel Boards in respect of any area or place in the Protectorate. Control is thus decentralized and powers of entry and inspection are conferred on all members of Boards, Medical Officers of Health, Health Inspectors and Police Officers. Boards are also given powers to fix maximum charges for accommodation, meals and drinks and to lay down standards.

(c) Public Health (Amendment) Ordinance, 1950. This Ordinance gives power to the Governor, on the advice of the Advisory Board of Health that it is in the interests of the public health so to do, to specify by order standards of quality, composition and condition and minimum standards in respect of any foodstuffs, goods or other articles.

12. Government Notices

(a) Government Notices Nos. 72 and 144 declare certain substances to be drugs within the meaning of the Dangerous Drugs Ordinance.

(b) Government Notice No. 26 promulgates the Control of Dogs Regulations, 1950, made under the Control of Dogs Ordinance, 1949. These Regulations lay down conditions for the registration of dogs, for the prevention of rabies and for the importation of dogs into the Protectorate.

(c) Government Notice No. 71 makes an Order, under section 34 of the Pharmacy and Poisons Ordinance, for the better control of patent medicines.

(d) Government Notices Nos. 73, 107 and 133 add certain drugs to the Poisons List, Parts 1 and 2.

(e) Government Notices Nos. 108 and 134 amend the Poisons Rules by bringing sulphetrone and organic phosphorus compounds within the provisions of Rules 6 and 12 respectively.

(f) Government Notices Nos. 127 and 211 extend the provisions of certain sections of the Public Health Ordinance, 1948, to areas around Monkey Bay and Zomba.

(g) Government Notice No. 174 revokes the appointment of a Sanitary Board in respect of Karonga. The Karonga Sanitary Area is likewise abolished and the Sanitary Board Rules lapsed.

(h) Government Notice No. 67 revokes and replaces Bye-laws of the Zomba Township Bye-laws Nos. 22 and 23 dealing with night soil, refuse and rubbish removal.

(i) Government Notice No. 195 revokes and replaces the Lilongwe Township Bye-law No. 73 which controls sewage outfall.

C. Visitors

13. During March Dr. J. Ross Innes, M.D., Interterritorial Leprologist to the East Africa High Commission spent one month in the Protectorate during which time he carried out a leprosy survey.

14. Professor F. Cambournac of Lisbon University visited the Territory in May as the World Health Organization Consultant in Malariology. His purpose was to obtain data for the Conference on Malaria in Africa which was held in Kampala during December, 1950.

15. During July a delegation of officers from the Provincial Administration in the Union of South Africa spent two days in the Territory. The delegation consisting of doctors, a senior Matron and Architects, was investigating the standard of hospital accommodation provided for Africans in East and Central African territories.

16. Dr. N. Lloyd-Rusby, D.M., F.R.C.P., Physician to the London Chest Hospital, paid a brief visit during August as a member of the Nuffield Panel of Medical Visitors. Unfortunately aircraft delays shortened the visit very considerably but Dr. Rusby was able to visit some of the hospitals in the Southern Province.

17. Sir Reginald-Watson-Jones, F.R.C.S., Sims Travelling Professor in Surgery, arrived during October and spent three days in Zomba and Blantyre. His visit was also made under the aegis of the Nuffield Panel of Medical Visitors. Sir Reginald operated at the Zomba African Hospital and led the discussion at a clinical meeting of the Nyasaland Branch of the British Medical Association.

18. During November Dr. D. M. Blair, O.B.E., Director of Preventive Services, Southern Rhodesia, spent five days touring the Territory as the World Health Organization Consultant in Bilharzia for the British African Territories.

19. Dr. A. F. Mahaffy, Chairman of the Yellow Fever Panel of the World Health Organization, paid a brief visit during December in connection with the investigation proposed by the World Health Organization to delimit the southern boundary of the endemic yellow fever zone in Africa.

D. Financial

20. The estimated expenditure of the Department during 1950, exclusive of that chargeable to the Colonial Development and Welfare Fund, was 8.14 per cent. of the estimated total ordinary expenditure of the Protectorate, and 5.89 per cent. of the estimated total expenditure.

21. Expenditure from Colonial Development and Welfare Fund grants was estimated to be £7,728-4s-2d. Of this total £4,652-0s-5d was expended on Scheme D505, Venereal Diseases Campaign.

22. The total revenue of the Department amounted to £7,896-2s-1d as against £6,314-13s-0d collected during 1949. This does not include the revenue from the sale of anti-malarial drugs through Post Offices. Revenue was collected under the following Heads :

				1949			1950		
				£	s	d	£	s	d
Hospital Fees	..	..	..	3,516	17	7	5,191	10	8
Sale of Stores	..	..	..	2,160	13	11	1,648	6	2
Pathological Fees	..	..	..	17	17	0	43	1	0
Radiological Fees	..	..	..	198	9	0	302	18	6
Dental Fees	..	..	..	382	6	10	642	10	1
Ambulance Fees	..	..	..	17	8	8	27	12	8
Yellow Fever Inoculation Fees	..		..	21	0	0	30	3	0
TOTAL				£6,314	13	0	£7,896	2	1

23. Sales of quinine, mepacrine and paludrine at Post Offices were as follows :

				1949			1950		
				£	s	d	£	s	d
Quinine	..	..	..	1,068	0	0	1,345	10	0
Mepacrine	..	..	..	392	2	4	289	4	7
Paludrine	..	..	..	600	6	8	1,031	16	8
TOTAL				£2,060	9	0	£2,666	11	3

SECTION II. PUBLIC HEALTH

A. General Remarks

24. The year 1950 was designed to be a period of consolidation of the existing health services during which the staff position would be stabilized, essential building projects got under way and plans made to give effect to the first stages of a development programme during 1951. To a limited extent, certain of these aims were achieved.

25. During 1949 a survey of the territorial finances had been undertaken with a view to relating the development programme for the period 1950 to 1955 to the funds estimated to be available and the Territory's capacity to undertake and complete the capital works necessary to implement the programme. Provisional allocations of funds were made and a plan for the development of departmental activities within the allocation was submitted.

26. The main difficulties encountered in framing the plan were the shortage of European health personnel and trained African auxiliaries, the limitation of building capacity by shortage of artisans and materials, delay in the delivery of essential supplies and inadequate travelling facilities. It was obvious that little constructive expansion could take place until the existing organization could be consolidated and its efficiency increased. Further, the rural curative service would have to be improved before the principles of prevention could be expounded with any conviction. A sick African thinks little of advice on how to prevent the disease he has already got. However, once he is cured or his symptoms alleviated, practical assistance with and instruction in the prevention of disease has some hope of acceptance.

27. The central curative units also required development of facilities and resources to speed up the turnover of patients in hospitals. To take two illustrative examples, many beds are occupied by patients suffering from tropical ulcer, and bilharziasis. The gloom of the "ulcer ward" is well known to Medical Officers who have served in the Colonies and the variety of treatments prescribed underlines the complexity of the problem. The length of the treatment necessary for the cure of bilharzia is again a serious drain on bed resources. There are many similar problems which, with the use of modern chemo-therapy, may be tackled expeditiously and efficiently with a corresponding saving in bricks and mortar for new institutions. However, standardization of treatments in the light of local conditions can only be worked out in a central and well equipped unit with the most adequate resources the Territory can afford. Therefore a modern central curative unit staffed by a team of specialists of wide general experience of tropical conditions is essential. The priority in the plan was accordingly given to the building of a Central Hospital and Laboratory where the specialist staff would be concentrated and a training school for Hospital Assistants developed.

28. Next in order of importance was the training of Medical Aides. These men serve the dual purpose of providing nursing, dispensary and laboratory staff for the hospitals and rural dispensaries. The approach to the improvement of rural hygiene is through the rural dispensary; the men in charge of rural dispensaries are in the most intimate contact with the village communities and it is through them that practical advances can best be made. As a corollary, the Sanitary Assistant must be the demonstrator of how advice can be put into practice. Accordingly more and better trained men are necessary for these complementary services.

29. During the year a new Training School for Medical Aides at Lilongwe was planned and the building started. The course of training for Sanitary Assistants has been extended to cover two years. The salary status of Medical Aides and Sanitary Assistants was equated and more emphasis laid on the prevention of disease in the Medical Aides' Course. At the same time preliminary plans were made to establish a definite roster of visits by Medical Aides to villages within a 10-12 mile radius of rural dispensaries with a system of follow-up by the Sanitary Assistants. This organization is necessarily restricted and experimental at its present stage and its success will depend on the extent of the supervision possible by qualified medical and health staff. Increased provision has been made for transport and travelling during 1951 with this end in view.

30. Next there are certain specific problems which can be tackled with absolute control in the future as the aim. These are leprosy and relapsing fever. Following on a more precise definition of the extent of the leprosy problem as the result of a leprosy survey carried out during the year, a central leprosy settlement is being planned and increased provision made for sulphone therapy. The attack against relapsing fever is receiving attention under a Vector Control service.

31. Mental disease in the past has been restricted to Asylum provision for the protection of the community. During the year the first phase of the building of a new Mental Hospital was completed and a Medical Officer with special experience in psychiatry and a wide knowledge of the Nyasaland African was appointed and arrived to take over the care of mental patients. When the Mental Hospital is completed then a positive approach can be made to the curative and preventive aspects of mental illness.

32. Other development of central curative units is planned. Improvement and extension of the Zomba African Hospital incorporating a more adequate Central Laboratory was undertaken in the course of the year and provision made for a Midwives Hostel where it is planned to accommodate African women of Standard VI Education. At Lilongwe, the Provincial Headquarters of the Central Province, African and European Hospitals are being extended and the equipment improved. Provision has been made in the development plan for a grouped hospital unit at Kaning'ina which is to be the new capital of the Northern Province.

33. All the above are dependent for their success on a full establishment and adequate supplies. Although the medical staff situation has improved, there is still a shortage of general duty Medical Officers for what is virtually a minimal establishment to maintain existing services and for sound implementation of the Development Plan. By the end of the year appointments had been made to all vacant specialist posts and certain of the Officers had arrived.

34. Although the supply position was somewhat easier for part of the year, there was still considerable delay experienced in supplies coming forward. Substantially increased provision was made for accumulating a reasonable reserve during 1951 which would tide over periods of delay in the arrival and distribution of supplies. Particular attention was given to the supply of chemo-therapeutic remedies for hospital use, which although costing more initially are in reality cheaper if the turnover of patients in hospital is accelerated.

35. An important item of the original post-war development plan was the expansion of the rural dispensary service. It was proposed to construct a large number of Health Units and Dispensaries and to expand certain Dispensaries into Health Units. This proposal has had to be postponed owing to the lack of trained staff. There is a shortage of Hospital Assistants and Medical Aides and the present output of the Zomba Training School barely balances the wastage due to age, illness, retirements and resignations. Further there are a number of elderly men and partially-trained Medical Aides to be replaced before any notable expansion can be undertaken. The completion of the Lilongwe Training School during 1951 will allow the intake of trainees to be doubled with a corresponding increase in the output of Medical Aides at the end of 1953 and Hospital Assistants at the end of 1954. Therefore it will not be until 1955 that there will be any real prospect of expansion of the Health Unit and Dispensary service. In any case, the building potential of the Public Works Department is committed to capacity for the 1951 to 1955 period. Thus the only possible approach is through consolidation of the existing rural service which will be extended by domiciliary village visits from established units. All that can be hoped for meantime is the replacement of a limited number of temporary or derelict dispensary buildings plus a few very urgently required rural dispensaries in the remoter districts. Four Health Units were nearing completion by the end of 1950, in each case the work being undertaken to expand the scope of an established rural dispensary.

Work of the Year

36. The year opened with a potential famine situation developing as a result of the failure of the crops during 1949. Fortunately, the 1950 crops proved adequate and apart from a relatively localized hunger problem in districts of the Southern and Central Provinces, there was no major impact on the public health. There was a notable freedom from formidable epidemic diseases which might have been expected to occur.

37. The main events consisted of a greatly increased number of cases of poliomyelitis which, however, did not at any time reach epidemic proportions. Influenza of a virus Prime A strain swept through certain areas of the Central Province without affecting the Territory as a whole. Smallpox continued to occur sporadically and there was a sharp increase in the number of cases of relapsing fever in the Northern Province. At one time reports of greatly increased rodent activity were received, but there was no sign of mortality or other evidence suggesting an enzootic of sylvatic plague.

Effects of the Food Shortage

38. It was noted in the Annual Report for 1949 that by the end of that year a number of infants, young children and old persons were beginning to show signs of loss of condition in the affected areas. This was most evident in families where the head of the family was either absent from the Territory or was away working in another part of the Protectorate. Cases of malnutrition were being admitted to hospitals in small numbers during December, 1949.

39. In January, 1950, it became necessary to make free issues of food at the Native Authority centres which were most severely affected by the food shortage. This brought to light suddenly a considerable number of cases of acute and "acute on chronic" malnutrition. Despite the fact that officers of Government had been touring the affected areas intensively for many months and Native Authorities had been requested to notify immediately any marked deterioration of conditions, the majority of these cases had escaped detection in their villages. When, however, the issue of free food commenced and they appeared at the distribution centre, the concentration of these cases from numerous small villages and family groups of huts presented a somewhat alarming picture.

40. It was obviously impossible to accommodate any but the worst cases in hospitals and feeding camps were opened at focal points in the areas affected in the Southern and Central Provinces. The first camp was opened at Lirangwe in the Blantyre District on January 18th, 1950, followed by similar camps at Lunzu (Blantyre), Magomero (Zomba), Kalembo and Nagumbe (Fort Johnston) and Namphende (Mlanje), all in the Southern Province. In the Central Province only one camp was found to be necessary and was established at Chipala in the Dowa District.

41. Camps were established in tobacco barns not in use and in one case in Mission buildings. Prior to the opening, each camp was wired in and Health Inspectors supervised the cleansing, limewashing and treatment with insecticide of the buildings. Water for domestic use in the camps was chlorinated and temporary latrines constructed. Each camp was placed in charge of an European Officer and the cooking and feeding arrangements supervised by voluntary workers, notably members of the British Red Cross Society and of Missionary organizations. Medical inspection rooms were established at each camp in charge of a Hospital Assistant or an experienced Medical Aide.

42. All entrants to the camps were medically examined by a Medical Officer or a Hospital Assistant on admission, vaccinated if their condition permitted, and weighed. Persons requiring hospital treatment were evacuated to the relevant district hospital. Hospital Assistants and Medical Aides visited the villages of the areas affected and carried out house to house inspections to ensure that no cases of malnutrition were over-looked and that no epidemic disease existed.

43. All inmates of the camps were provided with at least one hot meal each day and supplementary meals were given as required. The diet consisted of maize flour, meat or fish, food yeast, dehydrated vegetables, red palm oil and salt. Through the generosity of an African in the Chiradzulu District, Mr. J. D. Warck, a donation of flour and sugar enabled this most welcome and appreciated addition to be made to the daily diet. A gift of dried milk from the British Red Cross Society proved to be invaluable for the feeding of the children and of others who could not at first assimilate the standard diet.

44. The majority of the inmates of the camps consisted of children of ages ranging from 3 to 12 years and of the very aged. Relatively very few young or middle-aged adults were admitted, except in the case of a mother or other relative attending to young children. It was found that a very careful watch had to be kept on these adults who, though apparently well enough fed, were not above consuming their children's rations as well as their own. Early on the children were segregated during mealtimes and their feeding supervised by one of the staff.

45. Advanced cases of malnutrition commonly showed a typical "hookworm tongue", loss of subcutaneous fat and dullness of the skin. Famine oedema was relatively common, especially in the very young. Angular stomatitis was rarely seen and pellagra was uncommon. A number of older children showed signs of kwashiashkar with typical changes in the hair, stunted growth and liver enlargement indicating that these children had been exposed to deprivation over a number of years, the acute condition being superimposed on a chronic malnutrition.

46. The Church of Scotland Mission Hospital in Blantyre admitted the greatest number of cases of malnutrition. The doctor in charge has commented on the fact that the majority of children treated were those of deserted wives, or mentally deficient persons devoid of any sense of responsibility. Again the relatively large number of old and debilitated persons requiring treatment reinforces the impression that the spirit of community responsibility was tried beyond its limits and that, in the crisis, traditional realism overcame the relatively new concept of social service. This was underlined by the behaviour of fit adults who appropriated the rations provided for their grossly under-nourished children.

47. The good rains of the 1949-1950 season re-established the food resources of the Territory and by the middle of April the feeding camps were closed down. In retrospect, there was an undoubtedly severe food shortage, but famine conditions in the accepted sense were by no means general. This was entirely due to the energetic action taken by Government in anticipation of the crisis and it is noteworthy that in the Central Province, where food distribution was started earlier, only one feeding camp was necessary. It also emphasises that the organization of food production and the distribution of surpluses is rightly taking a high priority in Government's plans for the future. It may be coincidence that the most severe shortages were experienced in areas given over predominantly to the production of tobacco.

48. The total number of persons admitted to hospitals and feeding camps was 4,575 of whom 2,836 were children. Of the total, 1,401 persons were admitted to hospital. Deaths reported to be due to starvation were 71, but it is believed that a number of these deaths were precipitated by malnutrition rather than due to starvation. Significantly, the average duration of stay in the feeding camps was 12 days.

Nyasaland Branch of the British Red Cross Society

49. The Nyasaland Branch of the Society was very active during the year and it is fitting to place on record an appreciation of the work done by the Branch, which was in the best traditions of the Red Cross. The opportunity to serve during the food crisis was not neglected and voluntary workers from the Divisions did splendid work in the Feeding Camps. The donation of dried milk from the Society in London was an invaluable contribution towards the welfare of infants and young children affected by the food shortage. Gifts of blankets and feeding utensils were also organized by the Branch.

50. The routine work of the Branch continued actively throughout the year. Frigidaires were given to two Mission Maternity and Child Welfare Clinics and two braille typewriters to the Lulwe School for the Blind. Other items of equipment and additional drugs for the treatment of leprosy were gifted to certain Medical Missions. The sewing parties of the Divisions of the Branch sent regular parcels of hospital requisites to the Mission hospitals and clinics. Government hospitals were also supplied by the Divisions with certain items not normally available from departmental sources.

51. A very successful Red Cross week was held from April 30th to May 6th, 1950.

Nyasaland Council of Women

52. The Council presented cots to the European Hospitals at Blantyre and Zomba and a basinette to the African Hospital at Zomba. These cots were presented to commemorate the birth of Prince Charles. This practical interest is gratefully acknowledged.

Midwives Board

53. The Board met twice during the year. District Supervisory Authorities were established and by the end of the year two Authorities had commenced work. These Authorities, under the chairmanship of a registered medical practitioner, are responsible for the supervision of the work of the Midwives in their districts.

Advisory Board of Health

54. Three meetings were held and towards the end of the year the Board was engaged in a survey of the sanitary services provided by the Town Councils of the Blantyre and Limbe townships. A report on the working of these services will be submitted during the early part of 1951.

Standing Medical Committee of the Central African Council

55. Three meetings of this Committee were held during the year in Salisbury, Lusaka and Zomba respectively. Plans were discussed for investigation on a regional basis of the leprosy and yellow fever problems in Central Africa. The meeting in Lusaka was attended by a representative from the South African Institute for Medical Research and the problems of yellow fever and the rickettsial diseases in Southern Africa were reviewed. The meeting in Zomba was held primarily to discuss the inter-territorial situation arising as a result of the declaration of Nyasaland as a yellow fever endemic area. The Director of Medical Services of the Bechuanaland Protectorate attended this meeting.

Buildings

56. The first phase of the building of the new Mental Hospital made good progress and by the end of the year the first four ward blocks, certain of the administrative buildings and the theatre, dispensary and laboratory block had been roofed. The finishing of these buildings and the completion of the reception block should be achieved early in 1951.

57. The Training School at Lilongwe also made good progress and it is anticipated that the School will start to function in the Autumn of 1951. A new Infectious Diseases block at the Lilongwe African Hospital was completed.

58. At Zomba the extensions to the out-patient block and the building of the Central Laboratory were almost completed by the end of the year ; the new out-patient department started to function during December. The laboratory buildings are still to be fitted out, but it is anticipated that they will be ready for occupation during the first half of 1951.

B. Communicable Diseases

59. *Smallpox.* There was a marked reduction in the incidence of cases of smallpox reported. A total of 295 cases with 53 deaths was recorded. Again the Northern Province afforded the smallest total of 24 cases with no deaths ; in the Central Province there were 189 cases and 46 deaths ; in the Southern Province 82 cases caused 7 deaths.

60. The maximum incidence occurred in the Lilongwe District early in the year. During this outbreak, commencing in October, 1949, a total of 199 cases with 53 deaths was notified. Control of the epidemic was difficult as it coincided with the hunger period when there was a considerable migration to and fro in search of food. The Health Inspector who was in charge of the control measures reports :

“Knowing that the confirmation of a case would necessitate closure of the village, it was largely a battle of wits to prevent concealment. For example, a pre-dawn raid of one village revealed that cases were being hidden in the bush from sunrise to sundown. Ultimately this village had 75 per cent. of the huts infected.”

61. A system of house to house inspections was instituted in the infected area and the outbreak was localized in this fashion to a few villages which could be effectively cordoned and vaccinated. The outbreak occurred a short time before the Tobacco Markets were due to open and at one stage the question of deferring the opening of the buying season was considered. However, the epidemic was brought under control in time to allow of the opening of the markets on schedule.

62. The other area of maximum incidence was in the Mlanje/Cholo area where 70 cases occurred with 7 deaths. This happened in the districts where a large number of labourers from Portuguese East Africa seek employment. It is instructive to note the distribution of cases throughout the year in these districts :

		<i>Jan.</i>	<i>Feb.</i>	<i>Mar.</i>	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>
Mlanje	..	—	—	11	2	1	1	3	1	4	8	12	4
Cholo	.. ..	5	—	—	7	—	1	1	1	4	1	3	—

Mlanje District is contiguous with Portuguese Mlanje and there is a constant to and fro movement across the border. Despite intensive vaccination on both sides of the border, many cases are missed due to the close intermingling of the inhabitants of the respective territories and administrative control of

contacts is lost once the border is crossed. Without expensive and elaborate cordon arrangements, strict control is impracticable. A systematic vaccination campaign, taking the district of each Native Authority in turn, is in progress.

63. The following Table sets out the distribution of cases and the results of vaccination carried out during the year.

TABLE I
VACCINATION AND SMALLPOX CASES, 1950

Medical District	Primary	Acceler- ated	Imme- diate	Not seen again	Total	SMALLPOX	
						Cases	Deaths
NORTHERN PROVINCE							
Karonga	16,234	523	1,979	15,138	33,874	1	—
Mzimba	1,897	1,441	1,687	886	5,911	23	—
Chinteché	6,860	444	127	72	7,503	—	—
TOTAL NORTHERN PROVINCE ..	24,991	2,408	3,793	16,096	47,288	24	—
CENTRAL PROVINCE							
Kasungu	9,497	3,113	3,602	14,326	30,538	23	3
Kota Kota	101	51	5	24,746	24,903	—	—
Fort Manning	1,645	718	756	13,127	16,246	27	9
Dowa	7,715	26	1,596	1,527	10,864	1	—
Lilongwe	5,948	3,053	3,112	12,404	24,517	127	33
Dedza	—	—	—	52,242	52,242	1	—
Ncheu	242	248	421	13,617	14,528	10	1
TOTAL CENTRAL PROVINCE ..	25,148	7,209	9,492	131,989	173,838	189	46
SOUTHERN PROVINCE							
Fort Johnston	4,346	2,134	2,138	4,302	12,920	—	—
Liwonde	10,073	—	1,790	28,599	40,462	—	—
Zomba, European Hospital ..	20	12	132	—	164	—	—
Zomba, African Hospital ..	—	—	—	817	817	1	—
Zomba, Health Inspector ..	—	—	—	7,213	7,213	—	—
Chiradzulu	3,547	2,341	2,146	2,063	10,097	—	—
Blantyre, European Hospital ..	10	14	34	410	468	—	—
Blantyre, African Hospital ..	1,016	—	—	7,624	8,640	10	—
Cholo	7,767	5,225	3,169	17,225	33,386	23	2
Mlanje	15,163	8,316	5,310	2,121	30,910	47	5
Chikwawa	8,070	4,369	3,191	6,240	21,870	1	—
Port Herald	2,347	1,621	860	3,966	8,794	—	—
TOTAL SOUTHERN PROVINCE ..	52,359	24,032	18,770	80,580	175,741	82	7
TOTAL PROTECTORATE ..	102,498	33,649	32,055	228,665	396,867	295	53

64. *Lymph Production.* Owing to shortage of technical staff, production was in abeyance throughout the year. A Laboratory Technician was appointed and took up duty in September. Preliminary plans for the resumption of the manufacture of vaccine were completed by the end of the year and manufacture will commence in January, 1951.

65. *Poliomyelitis.* There was a sharp increase in the number of cases notified. By the end of the year 33 cases had been recorded, all but two of these occurring in the Southern Province. There were no deaths and the majority of patients consisted of children between the ages of 1 and 6 years. Nine Europeans, one Asian and 23 Africans were affected.

66. Two African males died of an acute encephalitis in the Cholo District. The signs and symptoms were suggestive of a polio-encephalitis but were by no means typical. Death occurred within 48 hours of admission to hospital. A post-mortem examination of the second case was obtained and specimens of brain tissue were examined at the Virus Research Institute at Entebbe. Dr. Horgan reported that although the changes seen in the tissue were consistent with a polio-encephalitis, there was nothing specific to warrant a diagnosis of poliomyelitis and these two cases were not notified as such.

67. Specimen of faeces from a number of patients were sent to Dr. J. H. S. Gear of the South African Institute for Medical Research. Dr. Gear isolated strains of poliomyelitis from five patients and attempts were made to transfer these strains to rodents. At the time of writing these attempts had been unsuccessful and the strains were presumably of the non-Lansing type.

68. The first two cases occurred in May in brothers aged 8 and 6 years respectively, the elder boy developing paralysis of the lower limbs. The next cases occurred in July and the last case was notified towards the end of December. The following Table sets out the incidence according to age groups and the months of occurrence.

TABLE II

		1-5		6-10		11-20		21 and over		Age not recorded		Total
(a)	Age of occurrence	years		years		years						
	*No. of cases	..	19	..	4	..	1	..	3	..	6	.. 33
(b)	Month of occurrence	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total		
	No. of cases	..	2	..	—	..	1	..	3	..	3	.. 15
		..	2	..	—	..	1	..	3	..	3	.. 6
		..	2	..	—	..	1	..	3	..	3	.. 6

*Twenty-four of the cases whose ages are recorded developed paralysis.

69. It was possible to investigate the home conditions of the great majority of cases notified. In the African villages the very primitive sanitary conditions need no comment but in the European homes it is of interest that, with the exception of one case, sanitation was defective. Six of the cases occurred in homes where bucket latrines were in use and disposal of the contents was indiscriminate with consequent fly breeding; the other two came from houses where water-borne sanitation was in use but an intermittent water supply prevented proper flushing of the closets. Whatever the mode of transmission of the virus may be, the generally deficient sanitary arrangements in the urban areas must give cause for concern when poliomyelitis appears to be in a stage of epidemic increase in this region.

70. The first two cases occurred in European children resident at the Nyasaland Transport Co. bus terminal. No correlation with cases occurring in other districts at a later date could be demonstrated and it seems probable that the outbreak occurred as the result of an increased number of sporadic cases who infected a limited number of secondary cases living in the immediate neighbourhood.

71. Where cases occurred urgent attention was given to the state of environmental hygiene of the homes affected and the isolation of contacts was enforced. The public were advised to supervise closely the sanitary arrangements in the homes and their immediate environs, paying particular attention to the boiling of water for domestic use and the hygienic preparation of food. Surgical operations on the ear, nose and throat were suspended except in cases of urgency. There was no evidence to suggest that any of the cases of paralysis encountered were due to prophylactic inoculation against diphtheria or whooping cough.

72. *Influenza.* A total of 5,520 cases was reported during the year of which 3,067 occurred in the Kota Kota District and 2,173 in the Dedza District. The majority of cases occurred in the period June to October. There were 265 deaths reported of which 177 occurred in the Kota Kota District and 73 in the Dedza District. These figures must be accepted as an estimate only in that careful enumeration of the cases was impossible and information was gathered from a number of sources such as Native Authorities, Dispensaries and Missions.

73. A Medical Officer investigated the outbreak in the early stages and nasal and throat washings from 10 cases were obtained and sent to Dr. J. H. S. Gear of the South African Institute for Medical Research. Dr. Gear reported that the strain isolated was sent to the World Influenza Centre in London. It was designated A/Nyasaland/1950 and was identified as A-prime. As yet, it has not been proved to be identical with the current European strain but it is undoubtedly closely related.

74. It is of interest that the first reports were received from the Lake-shore Village of Native Authority Kachindamoto in June, from whence it spread northwards into the Dowa District, particularly along the thickly populated Lake-shore. From there it spread to the Kota Kota District. When the epidemic died out during November, other areas of the Territory remained unaffected.

75. Why the disease remained localized is a matter for conjecture. The original outbreak occurred on the northern extension of the railway line and the direction of spread was along the thickly populated Lake-shore areas. There is constant traffic from this area to the upland regions but no reports were received of any major epidemic increase away from the districts affected.

76. Clinically the symptoms were distressing cough, general malaise, flitting aches and pains. Pyrexia varied from 99F° to 103F° and there was marked prostration. Severe cases developed bronchopneumonia and there was a relatively high death rate amongst the debilitated and the aged and amongst infants.

77. *Rabies.* No human cases were reported during the year but the disease continued to manifest itself amongst domestic dogs, cats and bovines. The Veterinary Department instituted a system of prophylactic inoculation of domestic animals and administrative measures were taken to control dogs in the affected areas. These measures consisted of a more rigorous system of licensing and of the destruction of straying and unlicensed dogs.

78. *Yellow Fever.* In May, 1950, Nyasaland was declared to be an endemic yellow fever area by the World Health Organization. No prior consultation had taken place with the Governments concerned and the first official notification received was in the *Epidemiological Diseases Bulletin* issued weekly by the Organization. As Nyasaland is a signatory to both the Maritime and Aerial Conventions, it seemed probable that considerable dislocation would ensue. One of the likeliest causes of embarrassment was the control of the very large number of migrant labourers, sometimes accompanied by their families proceeding on a voluntary basis to Southern Rhodesia. The onus of applying quarantine restrictions naturally fell on the receiving territories. It seemed probable that a large organization would have to be set up for the purposes of quarantine and inoculation of African travellers proceeding through Portuguese East Africa and Northern Rhodesia to the more southerly territories. An emergency meeting of the Standing Medical Committee of the Central African Council was convened and held in Zomba. Agreement was reached on the quarantine restrictions to be imposed but in view of the impracticability of controlling this large mass of unorganized African migration, it was decided that restrictions could be applied only to those persons travelling by air. The Committee was of the opinion that

88. *Malaria*. There were 36,984 cases of malaria attended at hospital out-patient departments, of whom 4,143 were admitted to hospital ; there were 95 deaths in hospitals due to malaria. Rural dispensary attendances accounted for 38,353 further cases. There were three cases of blackwater fever, of which two died.

89. Of the hospital out-patient cases, benign tertian malaria accounted for 1,152 cases, subtertian for 8,194 cases, quartan for 42 cases and 27,596 cases were unclassified.

90. As compared with 1949 there was an increase of 13,078 cases. District reports give no indication that there was any unusual increase in the incidence of malaria and no epidemics were reported. The rainfall during 1950 for the Territory as a whole was 62.51 inches ; during 1949 the corresponding figure was 31.44 inches.

91. Sales of anti-malarial drugs through the Post Offices increased and the sales of mepacrine and paludrine were almost doubled. The price of mepacrine was decreased substantially during the year and this undoubtedly had an influence on increased consumption. With regard to paludrine, however, the increased dosage necessary for efficient prophylaxis has gradually become more widely known and the daily dose of 0.1 gm. has replaced the bi-weekly dose of the same amount.

92. Control measures continued at all District Headquarters and in the urban areas. Routine oiling of breeding places is gradually being supplemented by other methods of control. Permanent anti-malarial works were continued in certain of the townships, but shortage of supervisory staff and materials means that the progress is very slow. During the year good progress was made at the Jeanes' School with drainage, canalization, and the planting of eucalypts ; drainage work was started at the Dedza Secondary School. At Cholo considerable progress was made under the supervision of the Medical Officer who prepared and laid out a scheme of work which has proved a very successful exposition of what can be done at relatively low cost by inter-departmental co-operation.

93. Work with insecticides was commenced at certain of the most malarious centres in the Lower River and the Lake-shore. This work is still in the experimental stage from the point of view of training staff, estimating costs and developing methods of application most suitable to local conditions.

94. *Bilharziasis*. A total of 16,635 cases were notified from hospitals and rural dispensaries. Of this total 8,232 were seen as hospital outpatients and 984 were admitted to hospital. There were two deaths.

95. Although not a killing disease bilharziasis has a tremendous influence on the standard of education attained at school and on the level of productivity of the adult population. The effect of bilharziasis on schoolchildren has been investigated widely during recent years and the results have shown that a low intelligence quotient in an endemic bilharzial area is frequently associated with the disease.

96. A small scale investigation at Kota Kota, the locus of a pilot experiment in control, showed that of 52 children at the Native Authority School, 92.2 per cent. were infested with *B. haematobium*. The adult population in that area show an incidence varying between 40 per cent. and 50 per cent. Preliminary work in the Domasi Development District suggests an overall incidence in the community of approximately 30 per cent.

97. The following figures from the Annual Reports for the period 1945 to 1949 give some indication of the actual morbidity encountered in out-patient practice :

			Total			
			Out-patients			
			attending			
				Out-patient	Bilharziasis	
					In-patient	
1945	..	..	*200,671	..	4,691	1,092 (2)
1946	..	..	232,582	..	5,079	
1947	..	..	277,836	..	6,786	1,177 (2)
1948	..	..	283,145	..	7,566	1,302 (3)
1949	..	..	341,749	..	9,959	995 (4)

Figures in parenthesis indicate deaths recorded.

*Of these cases 740 were due to *B. mansoni* (15.7 per cent.).

98. Of the cases of bilharziasis diagnosed by microscopic examination in the Central Laboratory over the period 1935-1939, 13.4 per cent. were due to *Schistosoma mansoni*. Reports from hospital laboratories during 1950 showed that the percentage of *mansoni* infections to total cases diagnosed as suffering from bilharziasis was 11.9 per cent. The range varied from no *mansoni* infections at Mzimba, in the Northern Province highlands to 27.7 per cent. at Karonga on the Lake-shore.

99. Dr. D. M. Blair, World Health Organization consultant in bilharziasis, visited the Territory during November and made a brief survey of the Southern Province. The Southern Rhodesian Bilharziasis Research Laboratory has been approved by the World Health Organization as a centre for the identification of snails ; and specimens may be sent to the Laboratory at World Health Organization expense.

100. *Ankylostomiasis*. 8,255 cases were treated at hospital out-patient departments of whom 2,125 were admitted to hospital, 23 deaths being recorded. A further 6,852 cases were seen at Rural Dispensaries, making a territorial total of 15,107.

101. Work is continuing to extend the provision of latrine accommodation in the villages. Under the supervision of Sanitary Assistants and Native Authority Sanitary Capitao's, campaigns to improve sanitation are proceeding and persistent offenders against the Native Authority Rules dealing with sanitation are being fined by the Native Authority Courts. Progress is slow, however, and patchy, dependent as it is on the continued interest and co-operation of the Native Authority concerned. It

is planned to follow up these campaigns by mass treatments in villages where the sanitary accommodation has been raised to an adequate level. Shortage of staff and supplies is likely to limit the extent of this work for some time to come.

102. *Trypanosomiasis*. One case was notified from the Fort Manning District, the patient being a woman from the Luangwe Valley in Northern Rhodesia. There were no cases reported amongst inhabitants of Nyasaland. This is the first time in 13 years that this has happened.

103. A tsetse fly survey was started by the Game, Fish and Tsetse Control Department under a grant from the Colonial Development and Welfare Fund. As the survey is only in its early stages, as yet no information is available.

104. *Leprosy*. By courtesy of the East Africa High Commission, the Interterritorial Leprologist Dr. J. Ross Innes carried out a leprosy survey of Nyasaland during April. The survey was designed to give a preliminary conspectus of the situation in the Territory and during the four-week period of the survey, 31,737 persons were inspected of whom 444 were found to have leprosy. Of this latter total 297 were males and 147 were females ; 20 per cent. of the cases were children between the ages of 6 years and 14 years ; lepromatous cases accounted for 22 per cent. of the whole. The following Table sets out the incidence by districts :

TABLE III									
*	(1)	(2)	(3)	(4)	(5)	(6)			
		<i>Ft.</i>							
1.	Blantyre	.. .. 4,000	Mixed Urban	.. ..	2,120	6	2.8		
2.	Lunzu	.. .. 4,000	Yao, Nyanja	.. ..	2,000	6	3.0		
3.	Mbame	.. .. 3,500	„ „	.. ..	296	1	3.4		
4.	Mabuka	.. .. 3,000	Nyanja	.. ..	402	5	12.1		
5.	Nkanda	.. .. 3,000	„	.. ..	885	8	9.0		
6.	Chimombo and Cholo	.. .. 3,300	Nyanja, Lomwe, Yao, Anguru		1,000	14	14.0		
7.	Mulele	.. .. 3,500	Nyanja, Lomwe, Khokhola		329	4	12.1		
8.	Chipwanya	.. .. 2,800	„ „ „		500	8	16.0		
9.	Port Herald	.. .. 125	Mang'anja	.. ..	1,100	33	30.0		
10.	Zomba	.. .. 3,200	Lomwe, Nyanja, Yao	.. ..	2,055	32	15.5		
11.	Chipoka and Mtembuka	.. .. 1,600	Yao	.. ..	200	4	20.0		
12.	Mponda	.. .. 1,600	„	.. ..	1,139	26	22.8		
13.	Jalasi	.. .. 3,200	„	.. ..	944	16	17.0		
14.	Kalembo	.. .. 1,600	„	.. ..	1,093	17	15.5		
15.	Fort Johnston	.. .. 1,600	Yao	.. ..	1,000	14	14.0		
16.	Gwaza	.. .. 3,000	Angoni	.. ..	740	7	9.4		
17.	Kachere and Maondi	.. .. 4,500	Angoni, Achewa	.. ..	1,105	12	10.8		
18.	Linthipe	.. .. 3,500	Achewa	.. ..	600	6	10.0		
19.	Mkhoma	.. .. 4,000	„	.. ..	750	11	14.6		
20.	Chadza	.. .. 3,800	„	.. ..	1,110	12	10.8		
21.	Lilongwe	.. .. 3,500	„	.. ..	420	4	9.5		
22.	Kamkusi	.. .. 3,600	Angoni, Achewa	.. ..	360	4	11.1		
23.	Salima	.. .. 1,600	Achewa, Nyanja, Yao	.. ..	1,285	27	21.0		
24.	Pemba	.. .. 1,600	„ „ „	.. ..	844	18	21.3		
25.	Mganga	.. .. 1,600	„ „ „	.. ..	1,400	32	22.8		
26.	Nchesa	.. .. 3,500	Achewa	.. ..	750	8	10.6		
27.	Mitundu	.. .. 3,800	Achewa, Yao	.. ..	2,000	16	8.0		
28.	Kasungu	.. .. 3,200	Achewa	.. ..	310	3	9.7		
29.	Mzukuzuku	.. .. 4,300	Angoni, Tumbuka	.. ..	534	0	0.0		
30.	Mzimba	.. .. 4,300	„ „	.. ..	442	1	2.2		
31.	Chinteché	.. .. 1,600	Tonga	.. ..	1,024	20	19.5		
32.	Karonga	.. .. 1,600	Konde	.. ..	3,000	69	23.0		
TOTALS				.. ..	31,737	444	14.0		

- * (1) Place
 (2) Altitude above sea level
 (3) Tribe
 (4) Number of persons examined
 (5) Number of cases of leprosy
 (6) Leprosy incidence per thousand.

105. The extent of the leprosy problem, as estimated from the survey, is that some 30,000 cases exist in the Territory of whom 22 per cent. are highly infectious and 30 per cent. are easily curable. Dr. Ross Innes recommended the establishment of a Central Government Leprosarium to accommodate 1,000 in-patients, the increased use of sulphones and that Medical Officers should be given facilities to treat cases of low infectivity as out-patients so that institutional treatment can be supplemented at relatively low cost. Government has accepted these recommendations in principle and steps are being taken to put them into effect.

106. Dr. Ross Innes did not favour the site originally chosen at Salima for the establishment of a Government Leprosarium. He recommended that a new site should be sought in the upland area of lower humidity. Possible sites were being surveyed in the Central Province during the year and by the end of December it appeared likely that a suitable site would be selected early in 1951.

107. Table IV below sets out the figures of in-patients treated in Government subsidized leper settlements.

TABLE IV

Settlement			In settlement beginning of 1950	Admitted or readmitted during 1950	Discharged or paroled during 1950	Absconded during 1950	Died during 1950	In settlement end 1950	Daily average in settle- ment	New Out-patients
Bandawe (Church of Scotland)	..	..	28	2	1	3	3	23	26	4
Likwenu (Universities Mission to Central Africa)	..	..	44	18	5	3	4	50	47	61
Loudon (Church of Scotland)	..	..	28	12	2	5	2	31	31	—
Malamulo (Seventh Day Adventists)	..	..	237	167	47	91	6	260	255	42
Mua (White Fathers)	..	..	292	175	172	—	31	264	283	—
Mwami (Seventh Day Adventists)	..	..	48	43	17	—	1	73	64	—
Utale (Marist Fathers)	..	..	357	245	109	19	19	455	382	—
TOTAL			1,034	662	353	121	66	1,156	1,088	107

108. The supply of sulphones improved considerably during the year and by the end of 1950 all leper settlements in the charge of a registered medical practitioner had been supplied with sufficient of the sulphone preparations to treat all patients in these settlements.

109. This issue of drugs makes treatment available to only a fraction of the lepers who would benefit but, as local experience is gained in the use of sulphones, it is proposed to extend the issue to nursing sisters in charge of Mission settlements that can be visited regularly by a Medical Officer with experience in the treatment of leprosy.

110. A striking feature noted, in those settlements in which sulphones are now in use, is the new spirit of hope that has replaced the previous apathy and gloom amongst the patients. A small number of patients who have been improving under treatment with ethyl esters have refused treatment with sulphones and have preferred to continue with the "injections". The majority, however, have taken to the new treatment with avidity and expressed their sense of well-being and hope of recovery.

111. *Tuberculosis.* 436 cases of tuberculosis of all forms were notified. Of these, 264 cases were due to tuberculosis of the respiratory system.

112. Dr. N. Lloyd-Rusby, M.D., F.R.C.P., visited the Territory during August. Unfortunately, owing to dislocation in the air service between East Africa and Nyasaland, Dr. Rusby's arrival was delayed and he had only three days in the Territory. From what he was able to see he formed the opinion that the situation in Nyasaland was broadly similar to that existing in East Africa and he gave advice on the planning of investigations and on broad lines of control.

113. The staff shortage has prevented any comprehensive investigation of the problem but, by the end of the year, plans had been made to assess the incidence of tuberculin reactors to tuberculin in the Domasi Development area in the Zomba District. This is to be done in conjunction with a general health survey of this area and work will commence in January, 1951.

114. Three cases of bovine tuberculosis were reported from Limbe, the cattle coming from Malamulo in the Cholo District. Mention was made in the 1949 Annual Report of the occurrence of bovine tuberculosis in herds in the Northern Province. As part of the investigation of the tuberculosis problem it is planned to assess the incidence of the disease in the cattle and if possible to type strains of *M. tuberculosis* from both humans and bovines.

115. *Venereal Diseases.* Free issues of drugs for the treatment of Venereal Diseases were continued under the Colonial Development and Welfare Fund grant of £42,000. The Table below sets out the number of cases treated under this Scheme since 1945 :

TABLE V

			<i>Cases treated at Govt. Hospitals and Dispensaries</i>		<i>Cases treated at non-Govt. Hospitals and Dispensaries</i>		<i>Total</i>
1945	..	..	5,671	..	Not known	..	5,671
1946	..	..	10,011	..	639	..	10,650
1947	..	..	17,987	..	1,906	..	19,884
1948	..	..	16,899	..	1,278	..	18,177
1949	..	..	19,580	..	2,670	..	22,250
1950	..	..	22,570	..	3,029	..	25,599

116. Of the 1950 total, 19,403 cases were reported as due to syphilis, 4,304 due to gonorrhoea and 1,892 due to other venereal diseases. Analysis of this latter figure shows that of this total only 104 cases were seen at hospital out-patient departments. The unduly large number of 1,788 persons suffering from "other venereal diseases" is due to faulty recording at rural dispensaries. There is no evidence to suggest that soft sore or *lymphogranuloma inguinale* is on the increase.

117. *Yaws*. There was a total of 2,778 cases of yaws recorded of whom 753 were treated as hospital out-patients. Of this latter total, 100 cases were treated in hospital.

C. General Diseases

118. Comment on this group of diseases is confined to those reported from the hospital out-patient departments unless specifically stated otherwise. The rural dispensary returns are based on the diagnoses made by Africans trained to recognize and treat the commoner endemic diseases. Therefore there are many inaccuracies and trends only are shown in Table VI in the section dealing with hospitals and dispensaries. The hospital out-patient figures do represent more accurate records and diagnoses.

119. *Deficiency Diseases*. Despite the food shortage during the early months of 1950 there was no marked increase in the total of deficiency diseases reported. The types of deficiency noted in the cases presenting themselves at feeding camps and hospitals have been referred to above. Of interest is the fact that the major deficiency disease reported in the hospital out-patient returns was pellagra, a total of 119 cases being recorded. In the feeding camps pellagra was seen rarely.

120. There must be many minor signs of nutritional deficiency in the general population, but such signs are merged into the varying clinical pictures presented by the common endemic diseases and thus are not specifically reported as such. As has been stated previously only a general and detailed survey of representative population groups will reveal the true incidence of the manifestations of nutritional defects.

121. *Diseases of the Skin and Cellular Tissues*. The total out-patient attendances for all causes at hospitals and rural dispensaries amounts to 1,007,433. Diseases of the skin and cellular tissues account for 171,133 attendances, which is just under 17 per cent. of the whole. 120,185 attendances are reported as being due to "ulcer" which amounts to 11.9 per cent. of the total patients seen. The great majority of ulcer cases are suffering from tropical ulcer, the incidence being at its peak during the rainy season when the agricultural workers are most urgently required. In a Territory where the economy is predominantly an agricultural one, this represents a health problem of considerable importance to the Territory. Organized labour forces can, to a great extent, be protected by early treatment of wounds and abrasions. The peasant farmer, however, has neither the knowledge nor the means at hand to practise prevention. The importance of early treatment is being stressed continually and it is planned to concentrate on the dissemination of knowledge and advice through the rural dispensaries, particularly during domiciliary visits by African auxiliaries.

122. *Diseases of the Digestive System*. This group accounts for 165,280 attendances at hospitals and rural dispensaries. At hospital out-patient departments 52,955 cases were seen and of this total dental caries accounted for 17.18 per cent., dyspepsia for 19.88 per cent., diarrhoea and enteritis for 14 per cent. and constipation for 38.2 per cent. Parasitic diseases of the gastro-intestinal tract are not included in the above total.

123. *Diseases of the Respiratory System*. At hospitals and rural dispensaries 162,530 attendances were recorded. Of this total 55,396 attended the hospital out-patient departments, acute bronchitis again being the major ailment seen and constituting 50.2 per cent. of the hospital out-patient attendances; coryza accounted for 18.7 per cent and pneumonia for 2.9 per cent.

124. *Eye Diseases*. 24,441 persons attended for treatment of eye complaints at hospital out-patient departments; conjunctivitis accounted for 23,378 of these attendances; corneal ulcer for 237 and trachoma for 48. The rural dispensary returns record another 54,457 attendances but the majority of these are reported as due to "other diseases of the eye".

125. According to the 1945 census figures there were 4,597 blind Africans in the Territory of whom 2,249 are females and 2,348 males. There were 42 blind under 1 year of age, 79 between 1 to 5 years, 459 between 5 to 18 years and 4,017 over 18 years. Thus there are approximately 600 children and young persons who would benefit by training.

126. A small beginning has been made in this direction by the South Africa General Mission in the Port Herald District, where a blind school has been established at Lulwe. During 1950 there were 10 children at the Lulwe School and 24 adults receiving training in handicrafts. Two young blind men are being trained as teachers in the school. A capital grant-in-aid was made by Government during 1950 and assistance towards recurrent expenditure is being given during 1951. The South Africa General Mission has been requested to submit its plans for the expansion of the work at Lulwe so that ways and means of providing practical help can be investigated.

127. The causes of blindness of 28 persons at the Lulwe School have been investigated. Measles was said to have been the cause in 14 instances, conjunctivitis in eight, smallpox in four, cataract in one and accident in one. It seems to be generally accepted by those engaged in work for the blind that measles is the commonest cause of blindness in this region of Africa, followed closely by the use of native medicines and the practice of witchcraft.

128. *Other forms of violence*. This accounted for 57,294 attendances at hospital out-patient departments, 21,661 of them being due to wounds. When the rural dispensary figures are added to those for the out-patient departments, the total for the Territory amounts to 141,806 attendances.

D. Hospitals and Dispensaries

129. *Hospitals.* A total of 34 European beds is available in Government Hospitals for European residents and the daily average number of in-patients was 19.21 as compared with 15.37 during 1949. There were 984 in-patients treated, of whom nine died ; 4,374 out-patient attendances were recorded.

130. There are 1,115 African beds in Government Hospitals and the daily average number of in-patients was 1,107.36 ; in-patients treated totalled 30,179 and there were 714 deaths. At the hospital out-patient departments 375,703 attendances were recorded.

131. Major improvements to buildings were completed during the year at Zomba and Lilongwe. At the Zomba African Hospital the new out-patient department was in use by the end of the year and has greatly facilitated the work there. At Lilongwe a new isolation ward was almost finished and a number of minor works undertaken to improve the services provided. At other hospitals only minor works, mainly in connection with services, could be undertaken.

132. *Rural Dispensaries.* There were 625,356 attendances at rural dispensaries, an increase of 18,836 over 1949.

133. It was possible to undertake minor repairs only at a few dispensaries and little progress can be expected in overcoming the backlog of work to be done until more materials and labour can be made available.

134. Distribution of medical supplies was more adequate, generally speaking, but by the end of the year the disturbed international situation had given rise to delay in deliveries and very considerable price increases. It seems inevitable that 1951 will be a year of shortages and that rural dispensaries will have to continue to operate with restricted supplies.

135. The following Table sets out the incidence of diseases by groups, reported from hospitals and rural dispensaries. The hospital out-patient returns for Africans are set out in Table XII at the end of the Report.

TABLE VI
INCIDENCE OF DISEASES ACCORDING TO GROUPS

						<i>Hospitals</i>	<i>Rural Dispensaries</i>
1.	Infectious and parasitic diseases	..	..	..	..	10,990	85,223
2.	Cancer and other tumours	..	..	..	..	202	162
3.	Rheumatism, diseases of nutrition and of endocrine glands and other general diseases	..	..	..	..	544	6,550
4.	Diseases of the blood and blood-forming organs	..	..	..	..	83	1,919
5.	Chronic poisoning	..	..	..	..	10	—
6.	Diseases of the nervous system and sense organs	..	..	..	..	1,340	69,194
7.	Diseases of the circulatory system	..	..	..	..	236	390
8.	Diseases of the respiratory system	..	..	..	..	2,431	107,134
9.	Diseases of the digestive system	..	..	..	..	1,389	112,325
10.	Non-venereal diseases of the genito-urinary system	..	..	..	..	705	1,472
11.	Diseases of pregnancy, childbirth and the puerperal state	..	..	..	..	1,816	475
12.	Diseases of the skin and cellular tissues and of bones and organs of locomotion	..	..	..	..	3,817	132,930
13.	Malformations and diseases of early infancy	..	..	..	..	39	—
14.	Senility	..	..	..	..	13	—
15.	Affections produced by external causes	..	..	..	..	3,503	86,294
16.	Ill-defined diseases	..	..	..	..	2,918	23,288
TOTAL						<u>30,036</u>	<u>627,288</u>

Total number of Out-patients at European and African Hospitals 380,077

E. Special Services

136. *Central Laboratory.* The Territory was without the services of a Pathologist throughout the year and the work of the Central Laboratory was continued under the supervision of the Medical Officer in charge of the Zomba European Hospital. During September a Laboratory Technician arrived on first appointment and took over the immediate supervision of the routine work. Information was received during November that a Pathologist had been appointed and would assume duty early in 1951. The post has been upgraded to that of a Junior Specialist.

137. A total of 21,268 specimens were examined in the Laboratory as follows :—

Bacteriology	..	..	..	8,697
Biochemistry	..	..	..	5,035 (including urines and C. S. F)
Haematology	..	..	..	461
Histology	..	..	..	88
Parasitology	..	..	..	6,987
TOTAL				<u>21,268</u>

138. The third-year students in the Hospital Assistants' course were given a course of practical instruction in elementary laboratory techniques.

139. The production of calf lymph had been suspended during the whole of 1950, but plans were made during the last quarter of the year to resume production early in 1951. Work had started on a new building to house calves prior to vaccination and the lymph laboratory was being repaired. Equipment essential to the more rapid production of a clean vaccine lymph had been ordered.

140. *Surgical Specialist.* The Surgical Specialist is based at the Zomba African Hospital where he is responsible for the teaching of elementary surgery to the third-year students in the Hospital Assistants' course. In addition clinics are held weekly in Blantyre and visits are paid to outstations as required. A total of 1,328 operations were carried out at the Zomba African Hospital of which 216 were major operations.

141. *Radiography.* New X-ray equipment arrived for the Lilongwe Hospital during the year but installation was not possible owing to delay in the arrival of the power unit. A portable X-ray machine also arrived and is based in Blantyre pending the installation of a reconditioned unit, formerly at the Zomba African Hospital, in the Blantyre African Hospital.

142. The appointment on agreement of a Radiographer at the Zomba African Hospital has greatly improved the diagnostic service provided. The Radiographer has three Hospital Assistants under training, two of whom will eventually be posted to Lilongwe and Blantyre. As yet the volume of work does not warrant a full-time Radiographer and the present officer is therefore engaged part-time in Secretarial duties.

143. A total of 1,570 patients were X-rayed during the year.

144. *Dental Officer.* The Dental Officer has his base at the Clinic in Zomba and pays visits to other centres at regular intervals. Two visits were paid to Lilongwe and two to Mzimba ; from the middle of July a weekly clinic was held in Blantyre.

145. The work continues to increase and a total of 4,724 attendances were recorded at the various centres ; of this number European attendances accounted for 1,908. During 1949 the relevant totals were 3,709 and 1,479 respectively.

146. The Dental Officer attends regularly at the Zomba Training School where the Hospital Assistants are given instruction in the techniques of local anaesthesia and extractions.

F. Maternity and Child Welfare

147. As in previous years the bulk of this work has been done by the Medical Missions, and those Centres in charge of a registered medical practitioner and a qualified European Midwife receive a grant-in-aid from Government.

TABLE VII

				<i>Antenatal Clinics (new cases)</i>		<i>Infant Welfare Clinics (new cases)</i>		<i>Confinements</i>
Church of England (4 centres)	..			673	..	421	..	389
Church of Scotland (5 centres)	..			2,425	..	2,123	..	2,257
White Fathers (5 centres) ..	..			2,177	..	2,755	..	1,186
Seventh Day Adventists (1 centre) ..	..			465	..	6	..	351
Dutch Reformed Church (5 centres)				1,285	..	445	..	1,083
Government Hospitals (12 Maternity Units)	..	..	..	1,931	..	1,022	..	1,626
TOTAL 1950	..	..		8,956		6,772		6,892
TOTAL 1949	..	..		9,045		8,782		7,742

148. It will be seen that there has been a considerable drop in the attendances recorded during 1950. The general concensus of opinion is that this is due to the food shortage occurring in the early part of the year with a consequently greater attention being paid to a search for food and to the weeding and gathering of crops. The reduced attendances continued, however, when all the crops were in and it has been suggested that many women lost the habit of attending the clinics and that it will be some time before the visits to the Centres are resumed. Another factor is undoubtedly that there has been a considerable inaccuracy in the recording of attendances and in one case the Midwife in charge of a Centre refused to provide the records requested. The whole question of recording and furnishing statistics is being investigated with a view to obtaining more factual information of the work done.

149. It seems almost certain that owing to the food shortage many more infants and young children were brought to hospitals and clinics. Quantities of dried milk, from the supply donated by the Red Cross, were made available to all Maternity and Child Welfare Centres on request. Great appreciation of this assistance has been expressed by the Missions and it is probable that a large number of attendances was included in hospital and dispensary returns rather than on the forms in use at the Clinics.

G. Training of African Personnel

Zomba Training School

150. *Hospital Assistants and Medical Aides.* At Zomba five candidates sat the Hospital Assistants' examination of whom four passed and were posted for duty as Hospital Assistants. One man was referred for six months. Out of 14 men who sat the examination for Medical Aides, eleven passed and five of these were selected for the Hospital Assistants' course. The other six were posted for duty as Medical Aides.

151. For the first time, sufficient Standard VI candidates made application for training to enable a degree of selection to be exercised. A total of 68 men applied, of whom 43 held the Government Standard VI certificate ; of these, 20 were selected for training and started the course during October.

152. Lectures on preventive medicine have been introduced into the course for Hospital Assistants and a preventive bias has been given to the lectures to Medical Aides.

153. *Sanitary Assistants.* The course of training was reorganized during the year and the period of training extended to two years. Of an intake of 18 trainees, 12 completed the first year and were posted to various districts under the supervision of Health Inspectors to receive six months' practical training in the field. These men will then return to the School for a further period of training before sitting the examination for Sanitary Assistants at the end of the second year.

154. The equation of the status and the salary scale of Sanitary Assistants with those of Medical Aides has made the course very much more popular and for the first time on record the applications for admission to the course have been in excess of the vacancies. It is considered to be vitally important that the Medical Aides and Sanitary Assistants should be brought to realize that their work is complementary and of equal importance. With this in view it has been arranged that lectures will be given by senior members of the European Staff to the combined classes during 1951.

155. *Midwives.* Nine first-year pupil midwives passed the examination and, of five second-year pupils, three passed the midwives examination and two were referred for six months. Thirteen candidates have been accepted for the 1951 course.

156. The Midwives Board has under consideration a course of training for girls with a Government Standard VI certificate or its equivalent. This course lasting for two years will be experimental in the first instance and will start at the Zomba Training School during 1951. The training will be conducted in English and Pupil Midwives who pass the second-year examination will be known as Midwives, Class II. The existing course, laid down in the Midwives Rules, 1947, is conducted in the vernacular and the entrance qualification is an ability to read and write the local vernacular language in use at the relevant training centre.

157. The training of pupil midwives in the vernacular has been largely in the hands of the Missions ; and the Midwives who qualify are engaged chiefly in village work. In the villages the young unmarried girl is not acceptable as a Midwife and therefore the vernacular training outside the Zomba School has been confined almost exclusively to married women. The Government-trained Midwives are posted to hospitals and do little domiciliary work. The result has been that the intake of married women for training has never met the demand and it is believed by those in charge of Mission Training Centres that the more highly educated Midwife will eventually be acceptable in the villages and the opposition based on tradition will gradually become less. From this point of view, therefore, it is desirable that Government should take the lead and post the more highly educated Midwife to hospitals and to Health Units where there will be an increasing scope for domiciliary work in the future.

SECTION III. VITAL STATISTICS

158. The following Tables show sick, invaliding and death rates for European and African officials during 1950, together with the corresponding figures for 1949.

Table VIIA. European Officials

				1949	1950
Total number of European officials resident	..	..	..	549	649
Average number resident	..	..	..	424.5	516.7
Total number on sick list	..	..	..	140	191
Total number of days on sick list	..	..	..	2,052	2,502
Average daily number on sick list	..	..	..	5.62	6.8
Percentage of sick to average number resident	..	..	..	1.32	1.1
Average number of days on sick list for each patient	..	..	..	14.66	13.09
Average sick time to each resident	..	..	..	3.74	3.85
Total number invalided	..	..	..	2	2
Percentage of invalidings to total resident	..	..	..	0.37	0.30
Total number of deaths	..	..	..	Nil	Nil
Percentage of deaths to total resident	..	..	..	Nil	Nil

Table VIIIB. African Officials

Total number of African officials resident	..	..	..	6,138	6,811
Average number resident	..	..	..	5,644	6,446
Total number on sick list	..	..	..	529	776
Total number of days on sick list	..	..	..	5,329	6,809
Average daily number on sick list	..	..	..	14.6	18.65
Percentage of sick to average number resident	..	..	..	0.26	0.29
Average number of days on sick list for each patient	..	..	..	10.7	8.77
Average sick time to each resident	..	..	..	0.87	0.99
Total number invalided	..	..	..	3	3
Percentage of invalidings to total number resident	..	..	..	0.04	0.004
Total number of deaths	..	..	..	6	5
Percentage of deaths to total number resident	..	..	..	0.1	0.007

SECTION IV. HYGIENE AND SANITATION

159. The environmental hygiene of the urban areas continued to give cause for anxiety, particularly in relation to the increased incidence of poliomyelitis encountered during the year. Certain progress has been made, particularly in the provision of housing for African Government employees. In Blantyre, Limbe, Zomba and Lilongwe, housing estates were planned and laid out and a certain number of houses completed. It is anticipated that during 1951 more progress will be apparent in the shape of completed permanent houses of design acceptable to the African and incorporating adequate standards of lighting and ventilation. Emphasis has been laid on the importance of housing estate management by the Africans themselves, guided by the representatives of the Provincial and District Administration, Public Works Department and Health Department.

160. While such progress is encouraging, the housing schemes are so dependent on the provision of essential services that the delay in providing adequate water supply and sanitation systems tends to vitiate to a great extent the schemes planned. The onus of providing these services is on the Local Authorities and the physical and financial difficulties arising are considerable.

161. Water supplies for the Townships of Blantyre, Limbe, Zomba and Lilongwe are in the course of construction. Shortage of materials and delay in the supplies of equipment make it unlikely that these schemes can be completed during the next two to three years. Without the water supplies, sanitation cannot be placed on a sound and permanent basis. Therefore interim schemes are essential and it is in this direction that most difficulty has been experienced.

162. Conservancy systems are in operation in all these townships. That these systems should be extended is essential but the labour willing to undertake this type of work is becoming progressively more difficult to obtain. Further, the capital costs of transport and equipment necessary to allow these systems to operate efficiently is heavy and the Local Authorities concerned are reluctant to spend money on what must be an interim arrangement pending the establishment of sewage schemes. Then, the repayment of loan charges from revenue received from urban African tenants cannot be expected, under present conditions, to be adequate to make the services economic.

163. During the year a number of aqua privy latrines were installed in certain of the Townships to serve the African population, both individually and communally. These privies were installed with some reluctance as an experimental measure. They have not been a success as close supervision and a convenient water supply are equally essential to ensure that the quantity necessary for efficient functioning is added to the tanks daily. These desiderata have not been achieved with the result that the installations have given a good deal of trouble.

164. Provided that the source of domestic water supply is not liable to pollution from pit latrines, this type of sanitation is probably the most satisfactory as an interim measure. However, such latrines must be properly constructed and the terrain suitable for their construction. The high water table which exists in many districts during a normal season renders this type of sanitation unsuitable ; in others the cost of construction or source of water supply may prohibit their use.

165. Accordingly in the urban areas the choice lies between a water-borne system or a bucket conservancy system. Certain of the Town Councils are now insisting that all new buildings shall be provided with septic tank sanitation for all European and African dwellings. In an area of low population density this may be adequate, provided the water supply is assured. In areas of high population density it is merely posing another problem for the future in that the small size of the plots available and the poor absorptive capacity of the soil will merely ensure gross pollution.

166. It is obvious that the sanitation systems of the urban areas require an early practical investigation by a sanitary engineer with tropical experience. Unless this is done at an early date the cost to posterity both in ill-health and in expenditure will be a serious brake on orderly development in these areas. The most important factor to be investigated is the means whereby the preponderant African population of the Townships can be served within the limits imposed by the funds available for capital and recurrent expenditure. An investigation of the problem in the Blantyre and Limbe Townships is being pursued by the Advisory Board of Health.

167. In Blantyre there has been a live interest in the health problems and the Town Council appointed a Health Sub-Committee of the Council during the year. A Health Inspector who is a full-time employee of the Council was appointed in September and considerable progress has been made towards putting existing services on a sound basis.

168. The Limbe Town Council has also agreed to appoint a full-time Health Inspector/Market Master and there is some prospect of the post being filled early in 1951. Limbe has its own peculiar problems in that existing domestic water supplies are almost entirely derived from shallow well and deep borehole sources. The bye-laws prohibit the construction of pit latrines ; all new buildings are now required to instal septic tank systems ; there are still a number of areas in the Townships where there is no water supply and therefore the only alternative is a bucket system. The existing organization has been unable to cope with the demands made upon it and therefore the situation in this Township has given considerable cause for anxiety.

169. In Lilongwe much the same state of affairs exists. Here there is a water supply derived from a dam on the river running through the Township. The catchment area, however, is heavily polluted and the domestic water supply commensurately unsafe. Plans are under way to improve and protect this supply and once these have been implemented it will be possible to tackle the problem of sanitation.

170. Zomba is more favourably situated in that there is a relatively pure water supply derived from a dam situated on the mountain. The storage area is being increased and a new reticulation system installed. The main problem in Zomba is to provide a comprehensive sewerage for the African part of the Township including such large institutions as the Central Prison, the K.A.R. cantonment, the African Hospital, the Mental Hospital and the Central Police Depot. All these units are grouped favourably for inclusion in the one system at reasonable expense.

171. *Rural Sanitation.* Work has continued towards the improvement of sanitary conditions in district headquarter stations, in trading centres and in the villages. The Health Inspectorate have been able to spend more time on district work and a start has been made to improve the environmental sanitation of a number of these centres of population. In the villages certain Native Authorities are taking an increasing interest in their health problems and applying enforcement of Native Authority Health Rules against habitual offenders. Although this is happening in a relatively small way, such progress as has been achieved is encouraging.

172. More attention is being paid to the system of Sanitary Boards who are responsible for environmental services in developing areas. As the whole system of Local Authority Government in the Territory is under review, however, little real progress can be made until Sanitary Boards are replaced by a similar statutory body responsible for these functions essential to the health and well-being of these small and isolated centres.

173. *Town Planning.* The Town Planning of Blantyre and Limbe, Kaning'ina and Nkata Bay continued during the year. The Blantyre/Limbe Town Planning Committee had almost completed the first stage of its work by the end of the year and the provisional Town Plan will be shown to the public early in 1951. The provisional plans for Kaning'ina and Nkata Bay were also well under way.

174. *Housing.* As stated above considerable progress was made in the provision of healthy housing for Government African employees. In certain district headquarter stations a number of houses had been completed and were in occupation.

175. A number of new houses for European Government employees were also completed during the year but there is still considerable lee-way to be made up. In co-operation with the Public Works Department, standard type plans for family houses to fit the varying needs of the low-lying humid areas, the highland malarial areas and the cold upland areas were agreed to. The aim is to provide a uniform standard of accommodation in all areas, with provision for insulation against heat and protection against mosquitoes in the most malarious areas; in the zones where seasonal transmission of malaria occurs but where the winter season is cold and damp, the design is modified accordingly. This represents a considerable advance in that these houses incorporate adequate health standards and safeguards against the prevalent insect-borne diseases.

176. Owing to the very serious shortage of African houses, the building of the lowest grade African quarter, which consists of a living-room, a bed-room and the necessary kitchen, store-room, ablution and latrine within its own compound, received priority. Standards of floor space, lighting and ventilation are adequate and are a big advance on previous standards. Once the main problem of shortage has eased, then the building of houses with accommodation for more senior African Staff will be undertaken.

177. *Vector Control.* Preliminary work on the establishment of an insecticide service to protect African and European Staff from the insect-borne diseases continued. Priority was given to the most unhealthy stations on the Lower River and the Lake-shore. In addition those stations where there is a relapsing fever problem received attention. Experience is being gained in the application of simple techniques and it is anticipated that there will be a considerable expansion of the service during 1951. Teams of Africans are being trained to undertake this work in the districts under supervision of the Health Inspector responsible for the area. Stocks of insecticide have been received but there has been considerable difficulty and delay in obtaining adequate and suitable supplies of spraying equipment.

178. *Port and Health Administration.* The Nyasaland Railways appointed their own Medical Officer during the year and he assumed duty in Limbe in July.

179. An outbreak of smallpox in Portuguese East Africa occurred during November and the staff of the Department undertook vaccination of all passengers not in possession of valid vaccination certificates who entered the Territory at Port Herald. Control was exercised over a period of four months and no secondary cases from this source were reported.

180. *Air Services.* The British Overseas Airways Corporation flying-boat service to Cape Maclear was discontinued at the end of October. Prior to this, sanitary control of all flying-boats southbound from the endemic yellow fever area was exercised.

181. Routine measures of mosquito control were continued at the Blantyre (Chileka) and Lilongwe aerodromes. Improvements in the airport buildings at Chileka have been effected.

182. *Hotels.* During the year Provincial Hotel Boards were established, the Provincial Medical Officers of the Provinces being the health representatives on the Boards.

183. *Industrial Health.* In conjunction with the Labour Department a number of visits were paid to industrial interests in the Protectorate. Owing to the great increase in construction work being undertaken the health of the inadequate labour forces is a matter of prime importance. Inspections were made of quarries, road camps and cotton ginneries and reports submitted to Government.

184. A visit was paid to a number of tea estates in order to assess the influence of environmental conditions on the health of labour and the effect of the common endemic diseases on production. Standards varied greatly but there is an increasing awareness of the importance of giving attention to the welfare of labour forces. Certain estates set a high standard of housing, feeding and sanitation. Others pay little attention to these essentials. The striking feature is the general interest in the provision of adequate housing at a cost within the means of the estates. A great deal of work is being done but the impression gained is the vital need for research into the provision of healthful housing at a reasonable cost.

185. Tropical ulcer may be termed the only occupational disease of the industry. Leg abrasions sustained in the tea gardens tend to become tropical ulcers which show the highest incidence during the rainy season when the production of tea is at its peak. Those estates where pre-employment examination of labour and first-aid treatment of injuries received in the gardens are practised, were notably free from this complaint.

186. Of the common endemic diseases, malaria, hookworm and bilharzia were most prevalent. Equal in importance is the incidence of respiratory disease. The influence of traditional housing, inadequately ventilated and thick with smoke, on the latter is plain. The protection of water supplies, the provision of efficient sanitation and regular medical supervision with a view to prophylaxis and treatment of these diseases need no stress in the interests of efficiency and output.

187. Visits were also paid by officers of the Department to the Colonial Development Corporation projects on the Vipya highlands and in the Nkata Bay area of the Lake-shore. During the year the Corporation appointed its own Medical Officer who arrived in the Territory and assumed duty in September. The Medical Officer is stationed at Mzuzu on the Vipya but is responsible for the health services to all the Corporation's projects in the Protectorate.

188. *Work of the Health Inspectorate.* The staff shortage continues to give cause for anxiety. The permitted establishment is one Chief Health Inspector and seven Health Inspectors. There are four vacant posts for Health Inspectors which means that normal leave requirements reduce the effective establishment to three qualified men, including the Chief Health Inspector. The situation was eased somewhat by the appointment of a Health Inspector by the Blantyre Town Council, but is still far from satisfactory in that there is only one Health Inspector available for the Southern Province and one for the Central and Northern Provinces. The Chief Health Inspector is fully occupied with his duties at the School for Sanitary Assistants. Therefore until more staff can be obtained there is little prospect of making steady progress towards a general improvement in the standards of environmental hygiene. Some advance has been made, but consolidation cannot be achieved unless regular and frequent supervision can be assured.

189. Work continued on permanent anti-malarial drainage works in Zomba and another 2,316 feet of stone drainage channels were completed in the Township. Shortage of cement prevented proper finishing of the work undertaken. At the headquarters of the Domasi Development area, advice was given on the permanent works necessary to abate mosquito breeding and the construction work is being pushed forward. In the Southern and Central Provinces assistance was given, in Sanitary Board areas and trading centres, to establish more satisfactory conditions of sanitation. In the Lower River area all Government dwellings and offices were treated with insecticide and similar work was undertaken at Kota Kota. At Kasungu and Mzimba, both foci of relapsing fever, the affected buildings were treated with gammexane.

190. Routine vaccination continued to be carried out by African Sanitary Assistants, attention being concentrated on the main routes of travel and the Mlanje District where there has been a number of small and isolated outbreaks of smallpox.

191. During July reports of greatly increased rodent activity were received from the Fort Johnston District of the Southern Province. Investigation revealed that there was a seasonal increase in activity, possibly greater than average. There were no signs of rodent mortality, however, and of rats examined, none yielded positive results for *P. pestis*. Sanitary Assistants, trained in simple methods of rodent destruction, were sent to the affected areas and the Native Authorities concerned showed a considerable interest in, and appreciation of, the assistance given.

192. Meat inspection was carried out by European and African members of the staff at the main centres of population.

193. Considerable attention was paid to the standards of cleanliness in the rapidly increasing number of African canteens, particularly in the urban areas. Model rules for the control of the canteen trade by Native Authorities were drafted for and adopted by the Provincial Administrations.

194. Mention has already been made of the work done during the early part of the year in connection with famine relief. No cases of epidemic disease were reported from any of the feeding camps established.

195. The occurrence of an increased number of cases of poliomyelitis entailed investigation of sanitary conditions in and around the dwellings of those affected. Advice and practical assistance was given by the Health Inspectors to those concerned.

196. A tribute is paid to the cheerful enthusiasm of the Health Staff as a whole in the prosecution of their duties under difficult and, at times, discouraging circumstances.

SECTION V. PRISONS AND ASYLUMS

197. *Prisons.* The health of the prisoners was good and there were no epidemics reported, apart from an outbreak of enteritis at the Central Prison. This occurred during the rains in April and was quickly brought under control by giving special attention to the cleaning and drying of feeding utensils.

198. The daily average number of prisoners in all prisons was 980.87, an increase of 29.45 over the previous year. The daily average number on the sick list was 17.08. The total number of deaths recorded was 27, of which judicial execution accounted for 11.

199. *Central Prison Hospital.* The daily average number of in-patients was 15.03, including those transferred to the Zomba African Hospital. The total number of out-patients attending the hospital was 5,289 of whom 567 were admitted to hospital. Male prisoners requiring special treatment and female prisoners are admitted to the Zomba African Hospital.

200. There were seven deaths from natural causes in the Central Prison during the year. The commonest conditions necessitating in-patient treatment were malaria, enteritis and pneumonia.

201. *Central Lunatic Asylum.* The daily average number of in-patients was 129.37 ; out-patient attendances numbered 2,253 of which 2,132 were males. 28 males and 3 females plus 1 Asian male were admitted during the year. 14 males and 4 females were discharged as cured or as fit to be handed over to the care of relatives. 83 males and 14 females were admitted to the Mental Hospital Ward. 28 patients died during the year, heart disease and chronic malnutrition accounting for 17 of these deaths.

202. As from 1st January, 1951, the administration of the Asylum will be taken over by the Medical Department. A Medical Officer was appointed and arrived at the end of December to take charge of the Asylum.

203. Good progress was made with building of the new Mental Hospital and by the end of the year the first four ward blocks, the administration, theatre and laboratory and reception blocks had been roofed and the interior work partially completed.

204. Conditions in the Lunatic Asylum improved considerably during the year as the result of the secondment of an officer of the Prisons Department to the Asylum to take over full charge of the administration. Medical Officers of the Department commenced a survey of all patients in relation to treatment. Unfortunately the great majority of patients suffer from advanced and incurable disease.

205. The visiting Committee, consisting of a Medical Officer as Chairman and three unofficial members appointed by His Excellency the Governor, met at the Mental Hospital on the first Saturday of every month. All admissions and discharges are reviewed by this Committee who also inspect the Asylum at each monthly meeting. Members of the Committee also visit individually at intervals.

206. *Acknowledgment.* The year was designed to be one of consolidation and of preliminary work on the plans for expansion of the health services within the development plan. Due to present-day conditions, shortages and delays have been inevitable and it is with gratitude that the enthusiasm and team work of all grades of staff are acknowledged.

ZOMBA, 9th May, 1951

D. J. M. MACKENZIE
Director of Medical Services

Table IXa. Return of Diseases and Deaths (European in-patients) for the year 1950

Diseases				Remain- ing at the end of 1948	Admissions during 1949	Total cases treated	Deaths	Remain- ing at the end of 1949
1-44. <i>Infectious and parasitic diseases.</i>								
1.	(a)	Typhoid fever	... ..	1	2	3	—	—
	(b)	Paratyphoid fever	... ..	—	3	3	—	1
4.		Relapsing fever	... ..	—	2	2	—	—
7.		Measles	... ..	—	2	2	—	—
10.		Diphtheria	... ..	—	2	2	—	—
11.		Influenza	... ..	—	7	7	—	—
13.		Dysentery						
	(a)	Amoebic	... ..	—	23	23	—	1
	(b)	Bacillary	... ..	1	18	19	—	—
	(c)	Unclassified	... ..	—	1	1	—	—
16.		Acute Poliomyelitis	... ..	—	9	9	—	1
34-35. Venereal Diseases :—								
	(c)	Other Venereal diseases	... ..	—	1	1	—	—
38. Malaria :—								
	(a)	Benign Tertian	... ..	—	8	8	—	—
	(b)	Subtertian	... ..	1	54	55	—	—
	(c)	Quartan	... ..	—	1	1	—	—
	(d)	Unclassified	... ..	—	117	117	3	1
41-42. Other helminthic diseases				—	5	5	—	—
15, 19, 20, Other infectious and/or parasitic								
36, 43, 44. diseases				—	4	4	—	—
45-55. Cancer and other tumours.								
	(a)	Malignant	... ..	—	10	10	3	—
	(b)	Non-malignant	... ..	—	1	1	—	—
56-69. Rheumatism, Diseases of Nutrition and Endocrine glands and other general diseases.								
56-57. Rheumatic conditions				—	5	5	—	—
65-69. (b) Endocrine glands and general				—	3	3	—	—
70-74. Diseases of the blood and blood- forming organs				—	3	3	—	—
75-77. Acute and Chronic Poisoning				—	1	1	—	—
78-89. Diseases of the Nervous System and Sense Organs.								
82. Cerebral haemorrhage				—	1	1	—	—
78-81, Other diseases of the nervous								
83-87. system				—	15	15	—	—
88. Other diseases of the eye, and annexa				—	7	7	—	—
89. Diseases of the ear and mastoid sinus				—	9	9	—	2
90-103. Diseases of the Circulatory System.								
90-95. (a) Heart Diseases				—	5	5	1	—
96-103. (b) Other circulatory diseases				—	17	17	1	—
104-114. Diseases of the Respiratory System.								
106. Bronchitis				—	21	21	—	1
107. (a) Broncho-pneumonia				—	2	2	—	—
(b) Lobar pneumonia				—	12	12	—	1
(c) Otherwise defined				—	1	1	—	—
104-105, Other diseases of the Respiratory								
110-114. System				—	30	30	—	1
Carried forward				3	402	405	8	9

Table IXa. Return of Diseases and Deaths (European in-patients) for the year 1950

Diseases				Remain- ing at the end of 1948	Admissions during 1949	Total cases treated	Deaths	Remain- ing at the end of 1949
<i>Brought forward</i>				3	402	405	8	9
115-129. <i>Diseases of the Digestive System.</i>								
119-120. Diarrhoea and enteritis :—								
(a) Under 2 years of age ...				—	7	7	—	—
(b) Over 2 years of age ...				—	43	43	—	1
121. Appendicitis				—	16	16	—	2
122. Hernia, intestinal obstruction ...				—	6	6	—	—
125-127. Other diseases of the liver and biliary passage				—	20	20	—	1
115-118, Other diseases of the Digestive 123-128, System								
129.				2	104	106	—	—
130-139. <i>Non-Venereal diseases of the Genito- Urinary System.</i>								
130-132. Nephritis (all forms)—								
(a) Acute				—	1	1	—	—
133-139. Other non-venereal diseases of the Genito-Urinary system ...				—	45	45	—	1
140-150. <i>Diseases of Pregnancy, Child-birth and the puerperal state.</i>								
140-142.								
(a) Abortion				—	14	14	—	—
(b) Ectopic gestation				—	2	2	—	—
145-147. (c) Toxaemias of pregnancy ...				—	4	4	—	—
149. Other accidents of childbirth ...				—	10	10	—	—
143, 144, Other conditions of the puerperal 148-150. state				—	110	110	—	5
151-156. <i>Diseases of the Skin, Cellular Tissues, Bones and Organs of Locomotion</i>				—	67	67	—	2
157-161. <i>Congenital Malformations and diseases of early infancy.</i>								
161. Other diseases peculiar to early infancy				—	1	1	—	—
163-198. <i>External Causes.</i>								
172-198. Other forms of violence ...				2	61	63	1	2
199-200. Ill-defined diseases				—	64	64	—	1
TOTALS ...				7	977	984	9	24

Table IXb. Return of Diseases and Deaths (Native In-patients) for the year 1950 (including Asiatics, Native Officials, K.A.R. Native Ranks, Native General Population, Asiatic and Native Convicts)

Diseases				Remain- ing at the end of the Year	Admissions	Total cases treated	Deaths	Remain- ing at the end of the Year
No.	Corresponding Number in International List. (1929) Revision	Title						
1 (a)	1.	(a)	Typhoid fever ..	6	9	15	2	1
1 (b)	2.	(b)	Paratyphoid fever ..	—	10	10	—	2
		(c)	Type undefined ..	—	1	1	—	—
2	3.		Typhus fever	—	3	3	—	—
3	4.		Relapsing fever	11	365	376	7	11
4	5.		Undulant fever	—	—	—	—	—
5	6.		Smallpox	—	4	4	—	—
6	7.		Measles	1	364	365	—	14
7	8.		Scarlet fever	—	1	1	—	—
8	9.		Whooping-Cough	5	118	123	1	9
9	10.		Diphtheria	—	7	7	—	—
10	11.		Influenza	—	10	10	—	—
11	12.		Cholera	—	—	—	—	—
12	13.		Dysentery—					
	13a.	(a)	Amoebic	6	167	173	1	7
	13b.	(b)	Bacillary	—	21	21	1	2
		(c)	Unclassified	—	32	32	2	2
13	14.		Plague—					
	14a.	(a)	Bubonic	—	—	—	—	—
	14b.	(b)	Pneumonic	—	—	—	—	—
		(c)	Septicaemic	—	—	—	—	—
14	16.		Acute poliomyelitis	—	6	6	—	—
15	17.		Encephalitis lethargica	—	—	—	—	—
16	18.		Cerebrospinal fever	—	7	7	3	1
17	21.		Rabies	—	—	—	—	—
18	22.		Tetanus	—	39	39	11	—
19	23.		Tuberculosis of the respiratory system	15	207	222	41	12
20	24-32.		Other tuberculous diseases	10	81	91	4	9
21	33.		Leprosy	5	77	82	1	3
22	34-35.		Venereal Diseases—					
		(a)	Syphilis	83	1,382	1,465	16	66
	35.	(b)	Gonorrhoea	7	537	544	2	10
	35.	(c)	Other venereal diseases ..	18	74	92	1	—
24	38.		Malaria—					
		(a)	Benign tertian	1	92	93	7	—
		(b)	Subtertian	46	1,602	1,648	59	37
		(c)	Quartan	—	43	43	2	—
		(d)	Cachexia	1	48	49	1	—
		(e)	Unclassified	42	2,087	2,129	23	38
25	44-6a.		Blackwater fever	—	2	2	2	—
26	39.		Kala-azar	—	—	—	—	—
27	39.		Trypanosomiasis	—	1	1	—	—
28	39.		Yaws	11	89	100	—	2
29	39.		Other protozoal diseases	—	—	—	—	—
30	40.		Ankylostomiasis	72	2,053	2,125	23	74
31	42.		Schistosomiasis	46	938	984	2	23
32	41, 42		Other helminthic diseases ..	3	162	165	1	5
33	15, 19, 20, 36, 43, 44.		Other infectious and/or parasitic diseases ..	2	91	93	5	1
34	45-55.		Cancer and other tumours					
	45-53.	(a)	Malignant	8	52	60	10	5
	54.	(b)	Non-malignant	2	125	127	1	7
	55.	(c)	Undetermined	—	14	14	1	2
35	56-57.		Rheumatic conditions	15	231	246	3	1
36	59.		Diabetes	—	6	6	2	—
37	60.		Scurvy	—	6	6	1	—
38	61.		Beri-beri	—	16	16	4	1
Carried forward				416	11,180	11,596	240	345

Table IXb. Return of Diseases and Deaths (Native In-patients) for the year 1950 (including Asiatics, Native Officials, K.A.R. Native Ranks, Native General Population, Asiatic and Native Convicts)

Diseases			Remain- ing at the end of the Year	Admissions	Total cases treated	Deaths	Remain- ing at the end of the Year
No.	Corresponding Number in International List. (1929) Revision	Title					
		<i>Brought forward</i>	416	11,180	11,596	240	345
39	62.	Pellagra	6	17	23	1	2
40	58, 63, 64.	<i>Other diseases—</i>					
		(a) Nutritional	—	5	5	2	3
	65–69.	(b) Endocrine glands and general	3	255	258	18	—
41	70–74.	Diseases of the blood and blood-forming organs ..	6	80	86	10	12
42	75–77.	Acute and chronic poisoning	—	9	9	—	—
43	82.	Cerebral haemorrhage ..	7	68	75	10	5
44	78–81,	Other diseases of the nervous					
	83–87	system	5	180	185	20	8
45	88.	Trachoma	1	15	16	—	1
46	88.	Other diseases of the eye and annexa	33	905	938	—	29
47	89.	Diseases of the ear and mas- toid sinus	3	140	143	2	2
48	90–103.	<i>Diseases of the circulatory system—</i>					
	90–95.	(a) Heart diseases ..	3	112	115	46	1
	96–103.	(b) Other circulatory diseases	2	102	104	3	2
49	106.	Bronchitis	17	801	818	6	8
50	107–109.	<i>Pneumonia—</i>					
	107.	(a) Broncho-pneumonia ..	3	317	320	50	9
		(b) Lobar-pneumonia ..	7	631	638	32	5
		(c) Otherwise defined ..	6	255	261	11	1
51	104–105.	Other diseases of the					
	110–114	respiratory system ..	1	361	362	7	14
52	119–120.	<i>Diarrhoea and enteritis—</i>					
		(a) Under 2 years of age	6	88	94	4	—
		(b) Over 2 years of age ..	5	220	225	7	1
58	121.	Appendicitis	—	32	32	1	2
54	122.	Hernia, intestinal obstruc- tion	13	161	174	6	6
55	124.	Cirrhosis of the liver ..	1	16	17	4	1
56	125–127.	Other diseases of the liver and biliary passage ..	4	96	100	6	2
57	115–118,	Other diseases of the diges- tive system	11	580	591	14	10
58	129						
	130–132.	Nephritis (all forms) ..	—	3	3	2	1
	130.	(a) Acute	1	23	24	5	1
	131.	(b) Chronic	1	35	36	5	1
59	133–139.	Other non-venereal diseases of the genito-urinary system	26	598	624	6	18
60	140–150.	<i>Diseases of pregnancy, child- birth, and the puerperal state—</i>	—	143	143	17	3
	140, 141,	(a) Abortion	—	128	128	2	3
	142	(b) Ectopic gestation ..	—	3	3	—	—
	145–147.	(c) Toxaemias of Pregnancy	1	43	54	2	1
	143, 144	(d) Other conditions of the					
	158, 150	puerperal state ..	34	1,349	1,383	2	23
61	151–156.	<i>Diseases of the skin, cellular tissue, bones and organs of locomotion</i> ..	220	3,750	3,970	10	169
		<i>Carried forward</i>	842	22,701	23,553	551	689

Table IXb. Return of Diseases and Deaths (Native In-patients) for the year 1950 (including Asiatics, Native Officials, K.A.R. Native Ranks, Native General Population, Asiatic and Native Convicts)

Diseases			Remain- ing at the end of the Year	Admissions	Total cases treated	Deaths	Remain- ing at the end of the Year
<i>No.</i>	<i>Corresponding Number in International List. (1929) Revision</i>	<i>Title</i>					
		<i>Brought Forward ..</i>	842	22,701	23,553	551	689
62	157-161.	<i>Congenital malformations and diseases of early infancy—</i>	1	7	8	1	1
	158.	<i>(a) Congenital debility (children under one year)</i>	—	13	13	—	—
	159.	<i>(b) Premature birth (do)</i>	1	13	14	2	1
	160.	<i>(c) Injury at birth (do) ..</i>	—	—	—	—	—
63	162.	<i>Senility</i>	1	13	14	5	—
64	163-198.	<i>External causes.</i>					
	163-171.	<i>(a) Suicide</i>	—	2	2	2	—
	172-198.	<i>(b) Other forms of violence</i>	182	3,440	3,622	115	161
65	199-200.	<i>Ill-defined</i>	93	2,854	2,947	38	43
		TOTAL ..	1,120	29,043	30,173	714	895

Table Xa. Return of Diseases (European Out-patients) for the year 1950

<i>Diseases</i>			<i>Diseases</i>		
	<i>Males</i>	<i>Females</i>		<i>Males</i>	<i>Females</i>
1-44. <i>Infectious and parasitic Diseases.</i>			Brought forward ...	349	231
1-2. Enteric Group :—			56-69. <i>Rheumatism, diseases of Nutrition and Endocrine Glands and other general diseases.</i>		
1. (a) Typhoid Fever ...	1	—	56-57. Rheumatic conditions	36	23
2. (b) Paratyphoid ...	2	2	59. Diabetes ...	4	—
4. Relapsing Fever ...	1	—	65-69. Other diseases—		
7. Measles ...	9	7	(a) Endocrine glands and general ...	—	8
9. Whooping cough ...	4	3	70-74. <i>Diseases of the Blood and Blood-forming Organs</i> ...	6	36
10. Diphtheria ...	2	—	75-77. <i>Acute and chronic poisoning</i>	1	—
11. Influenza ...	25	18	78-89. <i>Diseases of the Nervous System and Sense Organs.</i>		
13. Dysentery—			82. Cerebral haemorrhage	1	—
(a) Amoebic ...	16	13	78, 81, Other diseases of the 83, 87. Nervous System ...	16	29
(b) Bacillary ...	25	20	88. Other diseases of the eye and annexa ...	56	38
(c) Unclassified ...	2	2	89. Diseases of the ear and mastoid sinus ...	116	50
16. Acute poliomyelitis ...	6	3	90-103. <i>Diseases of the Circulatory System.</i>		
24-32. Other tuberculous diseases ...	—	1	90-95. (a) Heart diseases	7	7
34-35. Venereal Diseases :—			96-103. (b) Other circulatory diseases ...	57	44
(a) Syphilis ...	2	1	104-114. <i>Diseases of the Respiratory System.</i>		
(b) Gonorrhea ...	8	1	106. Bronchitis ...	36	53
(c) Other venereal diseases ...	2	—	107-109. Pneumonia :—		
38. Malaria.			(a) Broncho-pneumonia	1	3
(a) Benign tertian ...	11	2	(b) Lobar pneumonia	9	2
(b) Subtertian ...	90	42	(c) Otherwise defined	1	—
(c) Quartan ...	1	—	104, 105, 110-114. Other diseases of the Respiratory System ...	145	124
(d) Cachexia ...	1	—	115-129. <i>Diseases of the Digestive System.</i>		
(e) Unclassified ...	146	87	119-120. Diarrhoea and Enteritis :—		
44-6a. Blackwater fever ...	1	—	(a) Under 2 years of age	39	3
42. Schistosomiasis ...	2	—	(b) Over 2 years of age	127	102
41-42. Other Helminthic diseases ...	5	10	Carried forward ...	1,052	784
15, 19, 20, 36, 40, 43, Other infectious and/ or parasitic diseases	17	9			
45-55. <i>Cancer and other Tumours.</i>					
(a) Malignant ...	6	3			
(b) Non-malignant ...	9	6			
(c) Undetermined ...	—	1			
Carried forward ...	394	231			

Table Xa. Return of Diseases (European Out-patients) for the year 1950

<i>Diseases</i>	<i>Males</i>	<i>Females</i>	<i>Diseases</i>	<i>Males</i>	<i>Females</i>
<i>Brought forward</i> ...	1,052	784	<i>Brought forward</i> ...	1,449	1,205
121. Appendicitis ...	12	5	143-144. (d) Other conditions of		
122. Hernia, intestinal obstruction ...	9	4	148, 150. the puerperal state ...	—	140
125-127. Other diseases of the liver and biliary passage	31	10	151-156. Diseases of the Skin, Cellular Tissues, Bones and Organs of Locomotion ...	441	282
115-118, 123, 128, Other diseases of the digestive system ...	295	232	157-161. Congenital malformations and Diseases of Early Infancy.		
130-139. Non-venereal Diseases of the Genito-urinary System.			161. Other diseases peculiar to early infancy ...	2	2
130-132. Nephritis (all forms):— 130. (a) Acute ...	1	—	163-198. External Causes.		
131. (b) Chronic ...	2	2	173-171. (a) Suicide ..	—	1
133-139. Other non-venereal diseases of the Genito-urinary system ...	47	143	172-198. (b) Other forms of violence ...	305	142
140-150. Diseases of Pregnancy, Childbirth and the Puerperal State.			199-200. Ill-defined diseases	203	202
140-141, (a) Abortion ...	—	20	TOTAL	2,400	1,974
142. (b) Ectopic gestation ...	—	1			
145-147 (c) Toxaemias of pregnancy ...	—	4			
<i>Carried forward</i> ...	1,449	1,205			

Table Xb. Return of Diseases (Native Out-patients) for the year 1950 (Including Asiatics Native Officials, K.A.R. Native Ranks, and Native Convicts)

<i>Diseases</i>			<i>Diseases</i>		
	<i>Males</i>	<i>Females</i>		<i>Males</i>	<i>Females</i>
1-44. <i>Infectious and parasitic diseases.</i>			Brought forward	44,786	25,775
1-2. Enteric Group :—			56-57. Rheumatic conditions	5,254	2,695
1. (a) Typhoid fever ...	12	6	59. Diabetes ...	7	—
(b) Paratyphoid fever ...	5	1	60. Scurvy ...	6	1
2. (c) Type undefined ...	1	—	61. Beri-beri ...	10	2
4. Relapsing fever ...	494	200	62. Pellagra ...	93	26
6. Smallpox ...	12	1	58-63-64. Other Diseases.		
7. Measles ...	474	474	(a) Nutritional ...	12	11
9. Whooping cough ...	420	438	65-69. (b) Endocrine Glands and general ...	136	147
10. Diphtheria ...	1	1	70-74. Diseases of the Blood and Blood-forming Organs ...	355	235
11. Influenza ...	74	76	75-77. Acute and chronic poisoning ...	11	1
13. Dysentery :—			78-89. Diseases of the Nervous System and Sense Organs.		
(a) Amoebic ...	190	56	82. Cerebral haemorrhage	72	20
(b) Bacillary ...	26	13	78-81, Other diseases of the		
(c) Unclassified ...	248	71	83-87 nervous system ...	1,887	895
16. Acute Poliomyelitis ...	4	3	88. Trachoma ...	21	27
17. Encephalitis lethargica	1	—	88. Other diseases of the eye and annexa ...	12,840	11,553
18. Cerebro-spinal fever ...	5	3	89. Diseases of the ear and mastoid sinus ...	5,254	2,972
22. Tetanus ...	7	6	90-103. Diseases of the Circulatory System.		
23-32. Tuberculosis all forms :—			90-95. (a) Heart diseases	173	75
23. Tuberculosis of the Respiratory System	188	76	96-103. (b) Other circulatory diseases ...	303	110
24-32. Other tuberculous diseases ...	96	30	104-114. Diseases of the Respiratory System.		
33. Leprosy	563	180	106. Bronchitis ...	18,578	10,219
34-35. Venereal diseases :—			107-109. Pneumonia.		
(a) Syphilis ...	4,172	3,167	(a) Broncho-pneumonia	244	169
(b) Gonorrhea ...	2,038	838	(b) Lobar-pneumonia	450	254
(c) Other venereal diseases ...	53	49	(c) Otherwise defined	331	176
38. Malaria :—			104-105,		
(a) Benign tertian	671	468	110-114. Other diseases of the Respiratory System ...	17,142	8,024
(b) Subtertian ...	4,874	3,188	115-129. Diseases of the Digestive System.		
(c) Quartan ...	1,291	21	119-120. Diarrhoea and Enteritis—		
(d) Cachexia ...	356	286	(a) Under 2 years of age ...	2,030	1,653
(e) Unclassified ...	15,891	9,558	(b) Over 2 years of age ...	2,237	1,298
44-6a. Black-water ...	1	1	121. Appendicitis ...	18	18
39. Trypanosomiasis ...	—	1	122. Hernia, intestinal obstruction ...	189	5
Yaws ...	407	346	124. Cirrhosis of the Liver ..	15	4
40. Ankylostomiasis ...	5,055	3,197	125-127. Other diseases of the Liver and Biliary passage ...	115	65
42. Schistosomiasis ...	6,001	2,229	115, 118, 123, Other diseases of the		
41, 42. Other Helminthic diseases ...	613	458	128, 129. Digestive System	29,559	15,975
15, 19, 40, 36, 43, 44. Other infectious and/or parasitic diseases ...	295	177		142,128	82,405
45-55. Cancer and other Tumours.					
(a) Malignant ...	37	25			
(b) Non-Malignant...	190	124			
(c) Undetermined ...	20	7			
56-69. Rheumatism, Diseases of Nutrition and Endocrine Glands and other general diseases.					
Carried forward ...	44,786	25,775			

Table Xb. Return of Diseases and Deaths (Native Out-patients) for the year 1950. (Including Asiatics, Native Officials, K.A.R., Native Ranks, and Native Convicts)

Diseases				Diseases			
		Males	Females			Males	Females
Brought forward ...		142,128	82,405	Brought forward ...		143,228	85,188
130-139.	Non-Venereal Diseases of the Genito-urinary system.			151-156.	Diseases of the Skin, Cellular Tissues, Bones and Organs of Locomotion ...	50,224	19,426
130-132.	Nephritis (all forms) :—			157-161.	Congenital Malformations and diseases of early infancy.		
(a) Acute ...	...	19	13	157-161.	(a) Congenital malformations ...	5	6
(b) Chronic ...	...	10	12		(b) Congenital debility (children under 1 year)	39	20
(c) Unclassified ...	...	15	2		(c) Premature birth (children under 1 year) ...	2	11
133-139.	Other non-venereal diseases of the Genito-urinary System ...	1,056	896		(d) Other diseases peculiar to early infancy ...	3	—
106-150.	Diseases of Pregnancy, Childbirth and the Puerperal state.			162.	Senility ...	53	3
140, 141, 142.	(a) Abortion ...	—	131	163-198.	External Causes ...		
145-147.	(b) Ectopic gestation ...	—	4	163-171.	Suicide ...	1	1
143, 144.	(c) Toxaemias of pregnancy ...	—	140	172-198.	Other forms of violence ...	45,868	11,426
148-150.	(d) Other diseases of the puerperal state ...	—	1,585	199-200.	Ill-defined diseases	14,859	5,809
Carried forward ...		143,228	85,188	TOTALS ...		254,282	121,890

